Varun Arora

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Education

- University of California, Santa Cruz
- UCSC GPA: 3.97
- Major GPA: 4.00
- Computer Engineering BS (Concentration: Systems Programming)

Skills

- MIPS Assembly, Java, C, HTML/CSS, Processing, Perl
  - Beginning-level experience with MatLab, C++, and Verilog
- Unix commands, Git commands
- Embedded programming
  - Used MIPS assembly and C with a ChipKit Uno32 microcontroller with multiple peripherals
  - Used XILINX ISE with an Adept FPGA with multiple peripherals
- Signal and system analysis
- Electric circuit design and analysis
- Logic design
- Data structures and abstract data types, General coding methodology
- Computer architecture
- Math: vector calculus and below, linear algebra and differential equations, discrete math
- Physics: Newtonian mechanics, waves, optics, electricity and magnetism, thermodynamics, general and special relativity

Work Experience

Intel: Undergrad Technical Intern - SDG TFM FEI [June 2015 - Present]
I work with the server development group in the tool flow methodology division focusing on the front-end infrastructure of Intel's next server-oriented chip. My initial responsibilities include writing scripts to aid in automation and efficiency as well assisting team members in the uniqification process of various IPs. My other responsibilities during my internship may include: chip layout circuit design, circuit checking, device evaluation, documentation, prototype construction and checkout, and evaluation of components.

UCSC: CE 110 "Computer Architecture" Tutor [Jan 2015 - March 2015]
Held weekly office hours to answer students' questions about computer architecture and provided assistance with students' homework and exam preparation.

UCSC: CS 5J "Intro to Programming in Java" Tutor & Grader [Sep 2014 – Dec 2014]
Responsible for instructing computer lab sections for students and helped them debug their assignments while reinforcing good coding practices and useful techniques. I was also responsible for grading the students' assignments based on the program specifications mandated by the professor and on my personal discretion relative to the difficulty of the program and the types of errors students made.

UCSC: Bionics Research Lab Contributor [Apr 2014 – Jun 2014]
Developed the early and middle stages of a rehabilitative game that interacted with 3D printed exoskeletons as input for stroke patients in C++ using Microsoft Visual Studio and Chai3D. Presented weekly progress reports and demos while developing. Professional programming techniques and etiquette were required in order to allow other research members to reuse and expand my contribution.